

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Previously Presented): An image formation device for forming an image on an image supporting member by an image formation unit, comprising:

first and second transfer units which transfer an image formed on the same image supporting member to a recording medium having front and back sides;

an inverting unit which inverts the front and back sides of said recording medium by an inverting path while conveying said recording medium from the first transfer unit to the second transfer unit, the inverting unit including a branched nail and conveyance rollers, wherein the image formation unit forms first and second surface images, the first transfer unit transfers the first surface image onto a first surface of said recording medium, and the second transfer unit transfers the second surface image onto a second surface of said recording medium inverted by the inverting unit; and

a maintenance unit which maintains the first surface image transferred onto the first surface of said recording medium by the first transfer unit and prevents disturbance at the time of inverting the recording medium.

Claim 2 (Previously Presented): The image formation device according to claim 1, wherein the image formation unit comprises:

a latent image formation unit which forms an electrostatic latent image; and

a developing unit which develops the formed electrostatic latent image with a toner as a developing particle.

Claim 3 (Previously Presented): The image formation device according to claim 2, wherein the image formation unit includes an intermediate transfer unit which transfers the

electrostatic latent image developed by the developing unit onto an intermediate transfer member.

Claim 4 (Previously Presented): The image formation device according to claim 2, wherein the developing unit includes one or more developing units.

Claim 5 (Previously Presented): The image formation device according to claim 3, wherein one or more image producing units are in contact with said intermediate transfer member.

Claim 6 (Original): The image formation device according to claim 5, wherein one or more photosensitive members are contacted with the intermediate transfer member for executing said intermediate transfer.

Claim 7 (Canceled).

Claim 8 (Currently Amended): The image formation device according to claim 1, wherein the image formation unit is configured to form an image by one of ~~jetting-charged ink-droplets~~, jetting a charged toner, ~~and~~ or selectively adhering a thin layer of a magnetic toner.

Claim 9 (Canceled).

Claim 10 (Previously Presented): The image formation device according to claim 1, wherein the first transfer unit comprises a non-contact transfer unit which transfers only the

first surface image onto the first surface of said recording medium without influencing the second surface image.

Claim 11 (Previously Presented): The image formation device according to claim 1, wherein the first transfer unit is configured to be separable from the image supporting member after the first surface image is transferred onto the first surface of said recording medium from the image supporting member while the second surface image passes by a position of said first transfer unit.

Claim 12 (Canceled).

Claim 13 (Previously Presented): The image formation device according to claim 1, wherein the maintenance unit comprises a heating fixation unit which fixes the first surface image of said recording medium.

Claim 14 (Previously Presented): The image formation device according to claim 13, wherein the maintenance unit comprises an application unit which applies a bias of the same polarity as a toner charge polarity to a member in contact with the first surface image transferred onto said recording medium between an installation position of the first transfer unit and an installation position of the second transfer unit.

Claim 15 (Previously Presented): The image formation device according to claim 1, wherein the second transfer unit transfers without contact with the first surface of said recording medium.

Claim 16 (Previously Presented): The image formation device according to claim 1, wherein the image formation device further comprises a transfer fixation unit which executes fixation simultaneously with transfer of at least one of the first and second transfer units.

Claim 17 (Previously Presented): The image formation device according to claim 1, wherein the image formation device further comprises first and second fixation units each executing fixation immediately after completing a transfer of the first and second transfer units, and

an amount of heat provided to a paper by the first fixation unit is set at an amount smaller than an amount of heat provided to said recording medium by the second fixation unit.

Claim 18 (Previously Presented): The image formation device according to claim 17, wherein the amount of heat in the first fixation unit is set in a range in which a cold offset is not caused.

Claim 19 (Previously Presented): The image formation device according to claim 17, wherein the first fixation unit comprises a fixation device that includes a heating member, comprising:

a heat generating member;

a film in contact with said heating member; and

a pressuring member in contact with said heating member with pressure via said film, for heating and fixation by passing the recording medium with an unfixed image formed thereon between said film and said pressuring member.

Claim 20 (Previously Presented): The image formation device according to claim 1, wherein the image formation device further comprises:

a tip end resist unit which aligns a predetermined position in a conveyance direction of said recording medium to be conveyed into the second transfer unit with an image tip end of the second surface image.

Claim 21 (Previously Presented): The image formation device according to claim 1, wherein the image formation device further comprises a lateral resist adjusting unit which adjusts a position of said recording medium in a direction orthogonal to a conveyance direction between the first transfer unit and the second transfer unit.

Claim 22 (Previously Presented): The image formation device according to claim 1, wherein a conveyance path for passage of said recording medium is set in at least one of the first transfer unit and the second transfer unit at the time of forming each of said first and second surface images.

Claim 23 (Previously Presented): The image formation device according to claim 1, wherein an interval between the first surface image and the second surface image is at least (the time necessary for inversion of the recording medium) x (the moving speed of the image supporting member).

Claim 24 (Previously Presented): The image formation device according to claim 1, wherein a conveyance speed of the recording medium to be conveyed to the second transfer unit after the image transfer by the first transfer unit is set at a speed higher than a linear speed of the image supporting member in a rotational direction.

Claim 25 (Previously Presented): The image formation device according to claim 1, wherein at least one of the first and second transfer units transfers the image along a belt-like shape.

Claim 26 (Previously Presented): An image formation device for forming an image on an image supporting member by an image formation unit, comprising:

first and second transfer units which transfer an image formed on the same image supporting member to a recording medium having front and back sides; and

an inverting unit which inverts the front and back sides of said recording medium by an inverting path while conveying said recording medium from the first transfer unit to the second transfer unit, the inverting unit including a branched nail and conveyance rollers,

wherein the image formation unit comprises:

a latent image formation unit which forms an electrostatic latent image; and  
a developing unit which visualizes the formed electrostatic latent image with a liquid developing agent containing a toner as a visualizing particle dispersed in a liquid solvent.

Claim 27 (Original): The image formation device according to claim 26, wherein said liquid developing agent has a characteristic to be cured by a predetermined physical function.

Claim 28 (Original): The image formation device according to claim 26, wherein the image formation unit includes an intermediate transfer unit which transfers the visualized image developed by the developing unit onto an intermediate transfer member.

Claim 29 (Previously Presented): The image formation device according to claim 28, wherein one or more image producing units are in contact with said intermediate transfer member.

Claim 30 (Original): The image formation device according to claim 29, wherein one or more photosensitive members are contacted with the intermediate transfer member for executing said intermediate transfer.

Claim 31 (Canceled).

Claim 32 (Previously Presented): The image formation device according to claim 26, wherein further the image formation unit forms first and second surface images, the first transfer unit transfers the first surface image onto a first surface of said recording medium, the second transfer unit transfers the second surface image onto a second surface of said recording medium inverted by the inverting unit, and a predetermined physical function hardens the first surface image transferred by the first transfer unit onto the first surface of said recording medium.

Claim 33 (Original): The image formation device according to claim 32, wherein the first transfer unit comprises a non-contact transfer unit which transfers only the first surface image onto the first surface of said recording medium without influencing the second surface image.

Claim 34 (Previously Presented): The image formation device according to claim 32, wherein the first transfer unit is configured to be separable from the image supporting

member after the first surface image is transferred onto the first surface of said recording medium from the image supporting member while the second surface image passes by a position of said first transfer unit.

Claim 35 (Previously Presented): The image formation device according to claim 32, wherein the image formation device further comprises a maintenance unit which maintains the first surface image transferred onto the first surface of said recording medium by the first transfer unit on said first surface and prevents disturbance at the time of inverting the recording medium.

Claim 36 (Original): The image formation device according to claim 35, wherein the maintenance unit comprises a heating fixation unit which fixes the first surface image of said recording medium.

Claim 37 (Previously Presented): The image formation device according to claim 36, wherein the maintenance unit further comprises an application unit which applies a bias of the same polarity as a toner charge polarity to a member in contact with the first surface image transferred onto said recording medium between an installation position of the first transfer unit and an installation position of the second transfer unit.

Claim 38 (Original): The image formation device according to claim 32, wherein the second transfer unit comprises a transfer unit which transfers without contact with the first surface of said recording medium.



Claim 39 (Previously Presented): The image formation device according to claim 32, wherein the image formation device further comprises:

a tip end resist unit which aligns a predetermined position in the conveyance direction of said recording medium to be conveyed into the second transfer unit with an image tip end of the second surface image.

Claim 40 (Previously Presented): The image formation device according to claim 32, wherein the image formation device further comprises a lateral resist adjusting unit which adjusts a position of said recording medium in a direction orthogonal to a conveyance direction between the first transfer unit and the second transfer unit.

Claim 41 (Previously Presented): The image formation device according to claim 32, wherein a conveyance path for passage of said recording medium is set in at least one of the first transfer unit and the second transfer unit at the time of forming each of said first and second surface images.

Claim 42 (Previously Presented): The image formation device according to claim 32, wherein an interval between the first surface image and the second surface image is at least (the time necessary for inversion of the recording medium) x (the moving speed of the image supporting member).

Claim 43 (Previously Presented): The image formation device according to claim 32, wherein a conveyance speed of the recording medium to be conveyed to the second transfer unit after the image transfer by the first transfer unit is set at a speed higher than a linear speed of the image supporting member in a rotational direction.

Claim 44 (Previously Presented): The image formation device according to claim 32, wherein at least one of the first and second transfer units transfers the image along a belt-like shape.

Claim 45 (Original): The image formation device according to claim 27, wherein the predetermined physical function is an optical function.

Claim 46 (Previously Presented): The image formation device according to claim 26, wherein the liquid solvent of said liquid developing agent is volatile.

Claim 47 (Previously Presented): The image formation device according to claim 26, wherein the liquid solvent of said liquid developing agent is permeable to the recording medium.

Claim 48 (Previously Presented): The image formation device according to claim 26, wherein the developing unit includes one or more developing members.

Claim 49 (Previously Presented): The image formation device according to claim 32, wherein a substance having a surface energy lower than the surface energy of the liquid developing agent is coated on a member to be contacted with the first surface image transferred onto said recording medium, between an installation position of the first transfer unit and an installation position of the second transfer unit.

Claim 50 (Previously Presented): The image formation device according to claim 1, wherein an outer circumference of said image supporting member is at least a length of { (the first surface image length) + (the second surface image length) + (inverting time by the inverting unit) x (image supporting member speed) }, and wherein images to be transferred onto the front and back sides of said recording medium are first and second surface images, the first surface image is transferred onto the first surface of said recording medium by the first transfer unit, and the second surface image is transferred onto the second surface of said recording medium, respectively.

Claim 51 (Previously Presented): The image formation device according to claim 1, wherein said image supporting member comprises one of a photosensitive member and an intermediate transfer member.

Claim 52 (Previously Presented): The image formation device according to claim 1, wherein said image supporting member is formed in a drum-like shape.

Claim 53 (Previously Presented): The image formation device according to claim 1, wherein the image formation device further comprises a transfer fixation unit executing each fixation simultaneously with transfer of at least one of the first and second transfer units.

Claim 54 (Previously Presented): The image formation device according to claim 1, wherein the image formation device further comprises:

first and second fixation units each executing fixation immediately after completing a transfer of the first and second transfer unit; and

an amount of heat provided to a paper by the first fixation unit is set at an amount smaller than an amount of heat provided to said recording medium by the second fixation unit.

Claim 55 (Previously Presented): The image formation device according to claim 54, wherein the amount of heat in the first fixation unit is set in a range in which a cold offset is not caused.

Claim 56 (Previously Presented): The image formation device according to claim 54, wherein the first fixation unit comprises a fixation device that includes a heating member, comprising:

- a heat generating member;
- a film in contact with said heating member; and
- a pressuring member in contact with said heating member with pressure via said film,

for heating and fixation by passing the recording medium with an unfixed image formed thereon between said film and said pressuring member.

Claim 57 (Previously Presented): The image formation device according to claim 1, wherein the image formation device further comprises a cooling unit which cools said image supporting member.

Claim 58 (Previously Presented): The image formation device according to claim 1, wherein the image formation device further comprises an interleaf mechanism.

Claim 59 (Previously Presented): An image formation method for forming an image on an image supporting member by an image formation unit, comprising:

forming a plurality of images on said image supporting member;

first transferring an image on said image supporting member on a first surface of a recording medium;

inverting front and back sides of the recording medium using a branched nail and conveyance rollers with the image transferred onto said first surface at the first transferring;

second transferring another image on said image supporting member onto a second surface of said recording medium with front and back sides inverted at the inverting; and

maintaining the image transferred onto the first surface of said recording medium and preventing disturbance at the time of inverting the recording medium.

Claim 60 (Previously Presented): The image formation method according to claim 59, wherein a different image can be formed between said image transferred onto said first surface and said another image.

Claims 61-62 (Canceled).

Claim 63 (Previously Presented): The image formation device according to claim 6, wherein the developing unit includes one or more developing members for each of said one or more photosensitive members for executing a developing operation.

Claim 64 (Previously Presented): The image formation device according to claim 30, wherein the developing unit is one or more developing units for each of said one or more photosensitive members for executing a developing operation.

Claim 65 (Previously Presented): The image formation device according to claim 1, wherein said image supporting member is formed in a belt-like shape.

Claim 66 (Previously Presented): An image formation system comprising:  
an inputting device for inputting image data; and  
an image formation device for forming an image based on the inputted image data, wherein the image formation device comprises an interleaf mechanism and an image information memory unit which accumulates the inputted image data for at least one screen, wherein the image formation device forms an image on an image supporting member by an image formation unit that includes:

first and second transfer units which transfer an image formed on the same image supporting member to a recording medium,

an inverting unit which inverts front and back sides of said recording medium by an inverting path while conveying said recording medium from the first transfer unit to the second transfer unit, wherein the image formation unit forms first and second surface images, the first transfer unit transfers the first surface image onto a first surface of said recording medium, and the second transfer unit transfers the second surface image onto a second surface of said recording medium inverted by the inverting unit; and

a maintenance unit which maintains the first surface image transferred onto the first surface of said recording medium by the first transfer unit and prevents disturbance at the time of inverting the recording medium.

Claim 67 (Previously Presented): An image formation system comprising:

an inputting device for inputting image data, wherein the inputting device includes an image reading device for optically reading a manuscript having two surfaces; and

an image formation device for forming an image based on the inputted image data, wherein the image formation device forms an image on an image supporting member by an image formation unit that includes:

first and second transfer units which transfer an image formed on the same image supporting member to a recording medium;

an inverting unit which inverts front and back sides of said recording medium by an inverting path while conveying said recording medium from the first transfer unit to the second transfer unit, the inverting unit including a branched nail and conveyance rollers, wherein a time for reading the two surfaces of the manuscript of said image reading device is set to at most a time for exposing dual sided images on the image supporting member, the image formation unit forms first and second surface images, the first transfer unit transfers the first surface image onto a first surface of said recording medium, and the second transfer unit transfers the second surface image onto a second surface of said recording medium inverted by the inverting unit; and

a maintenance unit which maintains the first surface image transferred onto the first surface of said recording medium by the first transfer unit and prevents disturbance at the time of inverting the recording medium.

Claim 68 (Currently Amended): An image formation device for forming an image on an image supporting member by an image formation unit, comprising:

first and second transfer units which transfer an image formed on the same image supporting member to a recording medium having front and back sides; and

an inverting unit which inverts the front and back sides of said recording medium by an inverting path while conveying said recording medium from the first transfer unit to the second transfer unit,

wherein the image formation unit comprises:

a latent image formation unit which forms an electrostatic latent image,

a developing unit which develops the formed electrostatic latent image with a toner as a developing particle, and

an intermediate transfer member, wherein the first transfer unit transfers the electrostatic latent image developed by the developing unit onto an ~~the~~ intermediate transfer member unit.

Claim 69 (Previously Presented): An image formation device for forming an image on an image supporting member by an image formation unit, comprising:

first and second transfer units which transfer an image formed on the same image supporting member to a recording medium having front and back sides;

an inverting unit which inverts the front and back sides of said recording medium by an inverting path while conveying said recording medium from the first transfer unit to the second transfer unit, wherein the image formation unit forms first and second surface images, the first transfer unit transfers the first surface image onto a first surface of said recording medium, and the second transfer unit transfers the second surface image onto a second surface of said recording medium inverted by the inverting unit; and

a maintenance unit which maintains the first surface image transferred onto the first surface of said recording medium by the first transfer unit and prevents disturbance at the time of inverting the recording medium,

wherein the image formation unit comprises:



a latent image formation unit which forms an electrostatic latent image, and  
one or more developing units which develop the formed electrostatic latent  
image with a toner as a developing particle.

Claim 70 (Currently Amended): An image formation device for forming an image on  
an image supporting member by an image formation unit, comprising:

first and second transfer units which transfer an image formed on the same image  
supporting member to a recording medium having front and back sides;

an inverting unit which inverts the front and back sides of said recording medium by  
an inverting path while conveying said recording medium from the first transfer unit to the  
second transfer unit, wherein the image formation unit forms first and second surface images,  
the first transfer unit transfers the first surface image onto a first surface of said recording  
medium, and the second transfer unit transfers the second surface image onto a second  
surface of said recording medium inverted by the inverting unit; and

a maintenance unit which maintains the first surface image transferred onto the first  
surface of said recording medium by the first transfer unit and prevents disturbance at the  
time of inverting the recording medium,

wherein the image formation unit is configured to form an image by one of ~~jetting~~  
~~charged ink droplets~~, jetting a charged toner, and or selectively adhering a thin layer of a  
magnetic toner.

Claim 71 (Canceled).

Claim 72 (Previously Presented): An image formation device for forming an image  
on an image supporting member by an image formation unit, comprising:

first and second transfer units which transfer an image formed on the same image supporting member to a recording medium having front and back sides;

an inverting unit which inverts the front and back sides of said recording medium by an inverting path while conveying said recording medium from the first transfer unit to the second transfer unit; and

a transfer fixation unit which executes fixation simultaneously with transfer of at least one of the first and second transfer units,

wherein the image formation unit forms first and second surface images, the first transfer unit transfers the first surface image onto a first surface of said recording medium, and the second transfer unit transfers the second surface image onto a second surface of said recording medium inverted by the inverting unit.

Claim 73 (Previously Presented): An image formation device for forming an image on an image supporting member by an image formation unit, comprising:

first and second transfer units which transfer an image formed on the same image supporting member to a recording medium having front and back sides;

an inverting unit which inverts the front and back sides of said recording medium by an inverting path while conveying said recording medium from the first transfer unit to the second transfer unit; and

first and second fixation units each executing fixation immediately after completing a transfer of the first and second transfer units,

wherein the image formation unit forms first and second surface images, the first transfer unit transfers the first surface image onto a first surface of said recording medium, and the second transfer unit transfers the second surface image onto a second surface of said recording medium inverted by the inverting unit, a thermal amount provided to a paper by the

first fixation unit is set at an amount smaller than a thermal amount provided to said recording medium by the second fixation unit.

Claim 74 (Previously Presented): An image formation device for forming an image on an image supporting member by an image formation unit, comprising:

first and second transfer units which transfer an image formed on the same image supporting member to a recording medium having front and back sides;

an inverting unit which inverts the front and back sides of said recording medium by an inverting path while conveying said recording medium from the first transfer unit to the second transfer unit, wherein the image formation unit forms first and second surface images, the first transfer unit transfers the first surface image onto a first surface of said recording medium, and the second transfer unit transfers the second surface image onto a second surface of said recording medium inverted by the inverting unit;

a tip end resist unit which matches a predetermined position in a conveyance direction of said recording medium to be conveyed into the second transfer unit; and

an image tip end of the second surface image.

Claim 75 (Previously Presented): An image formation device for forming an image on an image supporting member by an image formation unit, comprising:

first and second transfer units which transfer an image formed on the same image supporting member to a recording medium having front and back sides;

an inverting unit which inverts the front and back sides of said recording medium by an inverting path while conveying said recording medium from the first transfer unit to the second transfer unit; and

a lateral resist adjusting unit which matches said recording medium in a direction orthogonal to a conveyance direction between the first transfer unit and the second transfer unit,

wherein the image formation unit forms first and second surface images, the first transfer unit transfers the first surface image onto a first surface of said recording medium, and the second transfer unit transfers the second surface image onto a second surface of said recording medium inverted by the inverting unit.

Claim 76 (Previously Presented): An image formation device for forming an image on an image supporting member by an image formation unit, comprising:

first and second transfer units which transfer an image formed on the same image supporting member to a recording medium having front and back sides; and

an inverting unit which inverts the front and back sides of said recording medium by an inverting path while conveying said recording medium from the first transfer unit to the second transfer unit,

wherein the image formation unit forms first and second surface images, the first transfer unit transfers the first surface image onto a first surface of said recording medium, and the second transfer unit transfers the second surface image onto a second surface of said recording medium inverted by the inverting unit, and wherein an interval between the first surface image and the second surface image is at least (the time necessary for inversion of the recording medium) x (the moving speed of the image supporting member).

Claim 77 (Previously Presented): An image formation device for forming an image on an image supporting member by an image formation unit, comprising:

first and second transfer units which transfer an image formed on the same image supporting member to a recording medium having front and back sides; and

an inverting unit which inverts the front and back sides of said recording medium by an inverting path while conveying said recording medium from the first transfer unit to the second transfer unit,

wherein the image formation unit forms first and second surface images, the first transfer unit transfers the first surface image onto a first surface of said recording medium, and the second transfer unit transfers the second surface image onto a second surface of said recording medium inverted by the inverting unit, and wherein a conveyance speed of the recording medium to be conveyed to the second transfer unit after the image transfer by the first transfer unit is set at a speed higher than a linear speed of the image supporting member in a rotational direction.

Claim 78 (Previously Presented): An image formation device for forming an image on an image supporting member by an image formation unit, comprising:

first and second transfer units which transfer an image formed on the same image supporting member to a recording medium having front and back sides; and

an inverting unit which inverts the front and back sides of said recording medium by an inverting path while conveying said recording medium from the first transfer unit to the second transfer unit,

wherein the image formation unit forms first and second surface images, the first transfer unit transfers the first surface image onto a first surface of said recording medium, and the second transfer unit transfers the second surface image onto a second surface of said recording medium inverted by the inverting unit, and wherein at least one of the first and second transfer units transfers the image along a belt-like shape.

Claim 79 (Previously Presented): An image formation device for forming an image on an image supporting member by an image formation unit, comprising:

first and second transfer units which transfer an image formed on the same image supporting member to a recording medium having front and back sides; and

an inverting unit which inverts the front and back sides of said recording medium by an inverting path while conveying said recording medium from the first transfer unit to the second transfer unit,

wherein the image formation unit comprises:

a latent image formation unit which forms an electrostatic latent image, and

a developing unit which visualizes the formed electrostatic latent image with a liquid developing agent containing a toner as a visualizing particle dispersed in a liquid solvent.

Claim 80 (Previously Presented): An image formation device for forming an image on an image supporting member by an image formation unit, comprising:

first and second transfer units which transfer an image formed on the same image supporting member to a recording medium having front and back sides;

an inverting unit which inverts the front and back sides of said recording medium by an inverting path while conveying said recording medium from the first transfer unit to the second transfer unit; and

first and second fixation units each executing fixation immediately after completing a transfer of the first and second transfer unit,

wherein a thermal amount provided to a paper by the first fixation unit is set at an amount smaller than a thermal amount provided to said recording medium by the second fixation unit.